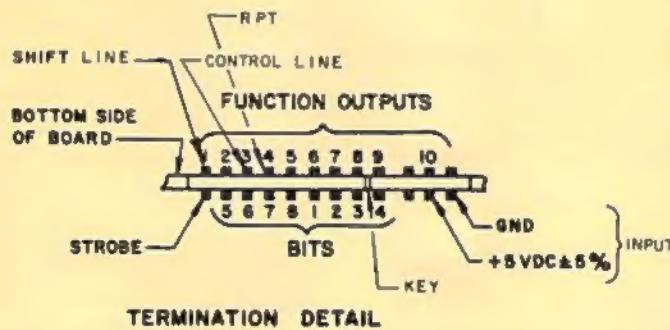
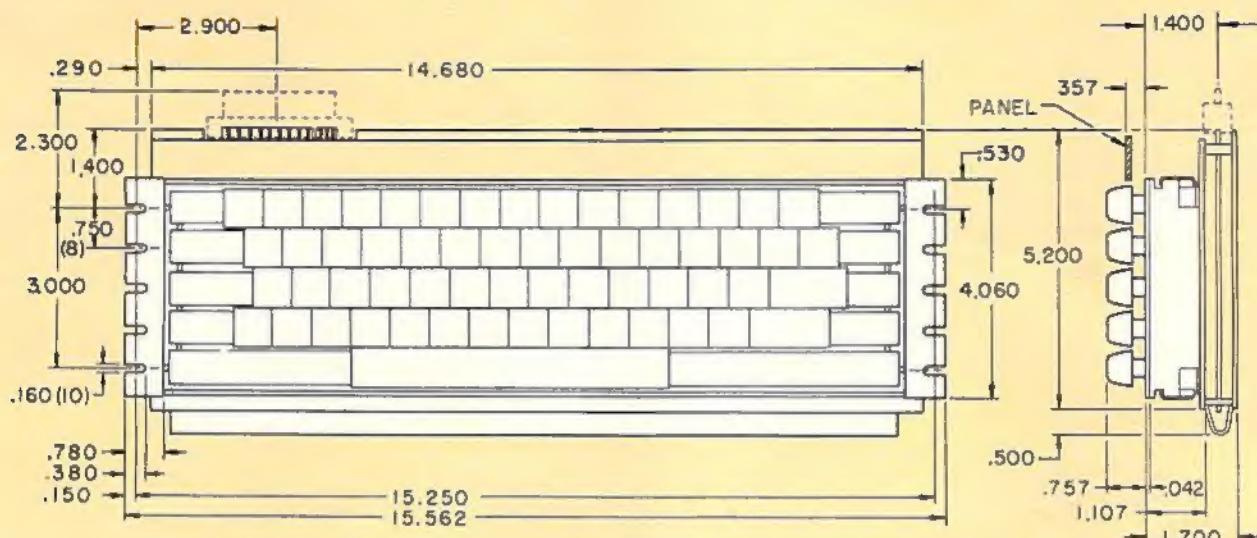


## Specifications



### POWER REQUIREMENTS

+5 volts DC regulated  $\pm 5\%$   
1 ampere maximum

### OUTPUT LEVELS

Negative logic: +5 volt DTL compatible  
Logic "0": +2.6 VDC minimum @ 0.12 milliamp  
Logic "1": +0.45 VDC maximum @ 12 milliamps

### FUNCTION KEY OUTPUTS

Key Operated: +3.15 VDC minimum @ 1 to 10 milliamps current source  
Key Unoperated: +0.25 VDC maximum with load resistance of 2,500 ohms or less.

### STROBE OUTPUT LEVELS

All keys in unoperated state: +2.6 VDC minimum @ 0.12 milliamps  
One Key Operated: +0.45 VDC maximum @ 12.0 milliamps  
Two-Key Rollover Condition: +2.6 VDC @ 0.12 milliamps

### KEY ASSIGNMENTS

54 keys encoded USASCII  
1 control key  
2 shift keys  
1 shift lock key  
1 space bar

### OUTPUT INTERFACE

Card-edge output accepts standard connectors such as: Cinch-Jones 251-12-30-160. This connector is furnished with a between contact key. Winchester 8BD 12. This connector has a between contact key but it has a separate catalog listing 109-8597. An equivalent connector may be used.

### WEIGHT

With Enclosure: 9 lbs. (approximately)  
Without Enclosure: 3.75 lbs (approximately)

### BUTTONS

MICRO SWITCH double shot-molded truncated buttons, gray with white legends.

### KEY ROW OFFSET

3/8 - 3/16 - 3/8 inch offset between rows. (Keys on 3/4 inch centers)

### BUTTON ORIENTATION

Sloped 13 degrees to horizontal.

### OPTIONS INCLUDED

Two Key Rollover  
Strobe (non delayed)  
Shift Lock  
Enclosure

# MIL-STD Array Solid State Keyboard - Product Sheet 59SW1-2

## SYSTEM CONTROL

A shift line and control line are provided to permit programming of your system to initiate keyboard shift. These lines can also be used for mode indication within your system.

**1. Shift Operation:** Shift of the keyboard can be initiated from your system by providing a current source input of 3.15 Volts DC minimum @ 10 millamps maximum to shift line termination pad (see termination detail). An open circuit (100 microamps maximum leakage) is required for the unshifted mode. The shift line must not be clamped to ground.

**2. Control Operation:** Control mode operation can be initiated from your system by using the control line termination pad. The electrical load information listed above for shift operation will also apply to control operation.

**3. Mode Indication:** The shift line and control line can also be used for mode indication to your system, provided that the system circuit load resistance is greater than 2,000 ohms to ground or 200,000 ohms to the positive supply. (An external emitter follower circuit with a current sinking resistor can be used to increase the load driving capability.)

## Code Assignment



Note: Control Character US Deleted

## USASCII Odd Parity

KEY NO.	UNSHIFTED MODE			SHIFTED MODE			CONTROL MODE			
	BITS		P	BITS		P	BITS		P	
	765	4321	P	765	4321	P	765	4321	P	
3	000	1000	0	000	1000	0	000	1000	0	
4	1	001	0	010	0001	1	011	0001	0	
5	2	0010	0	010	0010	1	011	0010	0	
6	3	0011	1	010	0011	0	011	0011	1	
7	4	0100	0	010	0100	1	011	0100	0	
8	5	0101	1	010	0101	0	011	0101	1	
9	6	0110	1	010	0110	0	011	0110	1	
10	7	0111	0	010	0111	1	011	0111	0	
11	8	1000	0	010	1000	1	011	1000	0	
12	9	1001	1	010	1001	0	011	1001	1	
13	0	0000	1	011	0000	1	011	0000	1	
14	-	010	1101	1	011	1101	0	010	1101	1
15	L	101	1011	0	111	1011	1	001	1011	1
16	J	101	1101	0	111	1101	1	001	1101	1
17	;	000	1001	1	000	1001	1	000	1001	1
23	WT	FUNCTION OUTPUT								
24	Q	111	0001	1	101	0001	0	001	0001	1
25	W	111	0111	1	101	0111	0	001	0111	1
26	E	110	0101	1	100	0101	0	000	0101	1
27	R	111	0010	1	101	0010	0	001	0010	1
28	T	111	0100	1	101	0100	0	001	0100	1
29	Y	111	1001	0	101	1001	1	001	1001	0
30	U	111	0101	0	101	0101	1	001	0101	0
31	I	110	1001	1	100	1001	0	000	1001	1
32	O	110	1111	1	100	1111	0	000	1111	1
33	P	111	0000	0	101	0000	1	001	0000	0
34	B	100	0000	0	110	0000	1	000	0000	1
35	;	101	1100	1	111	1100	0	001	1100	0
36	;	101	1111	1	101	1111	1	001	1111	1
37	DEL	111	1111	0	111	1111	0	001	1111	0

\*See System Control

63	UNSHIFTED MODE	SHIFT LOCK*	SHFT LOCK
43	BITS	765	4321
44	A	110	0001
45	S	111	0011
46	D	110	0100
47	F	110	0110
48	G	110	0111
49	H	110	1000
50	J	110	1010
51	K	110	1011
52	L	110	1100
53	;	011	1011
54	:	011	1010
55	A	101	1110
56	G	000	1101
63	CONTROL MODE	CONTROL	CTRL
64	BITS	765	4321
65	Z	111	1010
66	X	111	1000
67	C	110	0011
68	V	111	0110
69	B	110	0010
70	N	110	1110
71	M	110	1101
72	,	010	1100
73	,	010	1110
74	/	010	1111
75	SHIFT*	SHFT	SHFT
76	BITS	765	4321
81	BITS	765	4321